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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,622

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Xinqi Liu

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EXAMINER

DEES, NIKKI H

ART UNIT

PAPER NUMBER

4174

NOTIFICATION DATE

DELIVERY MODE

10/31/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/523,622	Applicant(s) LIU ET AL.	
	Examiner Nikki H. Dees	Art Unit 4174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :3 November 2005, 15 June 2007, 4 October 2007.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP 608.01 (i)-(p).

Appropriate correction is required.

2. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 2 refers to claim 1, "wherein no acid-precipitation step is carried out." The final step in claim 1 requires "the neutral to alkaline region." This precludes the use of an acid-precipitation step and therefore claim 2 does not further limit claim 1.

3. Claims 5-16 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 5-16 not been further treated on the merits.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over General Foods Corp (JP 44-6211 B) in view of Muralidhara et al. (6,630,195).

6. Regarding claims 1 and 2, General Foods Corp. teaches a method for making a soy protein with a pleasant taste comprising mixing soy powder with water at pH from 3.5 to 5.5 (p.3 ¶3). The soluble fraction is removed, and the slurry is then adjusted to pH 6 to 8 (p. 4 ¶2). The extract solution containing soluble protein is then separated from the insoluble portion (p. 4 ¶3).

7. General Foods Corp. is silent as to separating this extraction solution while maintaining a neutral to alkaline pH, as well as to the use of counter-current extraction in the extraction step.

8. Muralidhara et al. teach a method for extracting oilseed material under basic conditions. The method comprises mixing an oilseed material with an aqueous alkaline solution, with pH of about 7.5 to 10 (col. 7 lines 34-53). The method produces a mixture of insoluble material, including proteins, in the aqueous phase (col. 7 lines 61-63). The method also comprises the use of multi-stage counter-current extractions to increase

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the efficiency of the extractions and produce an extract solution with a high concentration of dissolved solids (at least about 7%) (col. 8 lines 16-30).

9. The aqueous extract solution, with a pH of about 7.5, may then be subject to membrane filtration. The filtration retentate is then adjusted to pH 6.8 to 7.0, followed by spray drying (Example 4).

10. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the extraction method as taught by Muralidhara et al. with the acid-washed soy-protein flakes as taught by General Foods Corp. The artisan may have altered the source of the starting soy flakes in order to result in a final soy protein with the desired organoleptic properties.

11. Regarding the use of a three-stage counter-current extraction method, one of ordinary skill in the art would have the ability to adjust the number of stages in the counter-current extraction in order to provide for the most efficient protein recovery while keeping associated costs low.

12. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muralidhara et al. (6,630,195) in view of General Foods Corp (JP 44-6211 B).

13. Muralidhara et al. teach a method for extracting oilseed materials under basic conditions as discussed above.

14. Muralidhara et al. are silent as to the use of acid-washed protein flakes in their process.

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15. General Foods Corp. teach a process for acid washing soy-protein flakes followed by adjusting the flake slurry to a neutral to alkaline pH.

16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the acid-washed soy-protein flakes as taught by General Foods Corp. in the basic protein extracting method as taught by Muralidhara et al. in order to result in a soy-protein product with the most pleasing organoleptic properties.

17. Regarding the use of a three-stage counter-current extraction method, one of ordinary skill in the art would have the ability to adjust the number of stages in the counter-current extraction in order to provide for the most efficient protein recovery while keeping associated costs low.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikki H. Dees whose telephone number is (571) 270-3435. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nikki H. Dees
Examiner
Art Unit 4174



D. LAWRENCE TARAZANO
PRIMARY EXAMINER